# BROMO BROADCAST TECHNICAL CONSULTANTS COMMUNICATIONS Inc.

WILLIAM G. BROWN CLIFTON G. MOOR

Mail: P.O. Box 191747 Atlanta, Georgia 31119-1747

> Offices: 38 Kenmare Hall, NE Atlanta, Georgia 30324

Phone: (404) 266-2257 Fax: (404) 842-9535

Washington, DC: (202) 429-0600

www.bromocom.com

February 3, 2005

### Via FedEx Overnight

Ms. Marlene H. Dortch Secretary Federal Communications Commission The Portals 455 Twelfth Street, SW

Washington, DC 20554

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FEB 4 2005

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Dear Madame Secretary,

Enclosed please find nine copies of the Comments to Petition for Rulemaking, RM No. 11136.

Sincerely,

William G. Brown

Bromo Communications, Inc.

William G. Drown

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FFR 4 2005

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#### COMMENTS TO PETITION FOR RULEMAKING RM No. 11136

Amendment of Section 73.21 and 73.37 of the Commission's Rules to provide for facilities changes by stations operating in the expanded AM Band (1605-1705 kHz)

## Comments of Bromo Communications, Inc.

Bromo Communications is a Technical Consulting firm specializing in broadcasting matters before the Federal Communications Commission. This firm has represented broadcast clients before the Commission for 35 years. We represent both single and group owned broadcast stations. This company represents InterMart Broadcasting Companies, one of the petitioners in this proceeding.

We feel that a change in the rules will benefit the expanded band station and will be both more efficient in the long term for the Commission and in the public interest. A major premise in the establishment of the expanded band station would be to help reduce interference in the AM band. We agree with the premise and feel the first step will be accomplished once the original expanded band phase has been completed. Several major interference contributing stations have already been removed from the air with many others being removed within the next four to five years as this process comes to fruition. Any lessening of interference in the AM band is in the public interest.

The Commission felt it was best to assign new expanded band frequencies to stations that created the most interference. Therefore a plan was devised to determine the worst interference contributors and then determine if an expanded band frequency could be assigned to replace the regular band station.

Thus the Commission was required to determine the available inventory of new expanded band stations. If the Commission used the present AM allocation process to determine the availability of AM channels from 1610 to 1700 kHz the process would have been very lengthy and expensive. Therefore, a quicker and more efficient method was developed to determine the expanded band inventory. The more expedient process was called Model 1 with an entirely different set of standards relying strictly on mileage separation. The new process was similar to the current FM allocation process in that AM day and AM night were treated with no regard to ground conductivity or nighttime skywave conditions.

The presently used allocation rules did not create the AM interference situation we find today. Rather many of the former rules that allowed for given and received interference created the problem. Those rules allowed for interference under special conditions. They were eliminated in the 70's and 80's with what was called the "go no-go concept". It is felt that today's allocation rules do the best job of limiting AM interference and have served us well for the last 20 years.

Model 1 does simplify the AM allocation process by using a mileage separation matrix and it is much easier to computerize. But, it has outlived its need. It sounds good to say we are using similar FM allocation procedures for AM since we all know FM stations do not suffer from the amount of interference as do AM stations. However, AM is very different from FM. In fact, AM daytime propagation is very different from AM nighttime propagation. Using the laws of

<sup>&</sup>lt;sup>1</sup> Go for those applications that did not create new interference and no-go for those that did create new interference.

physics you cannot treat FM and AM or AM Day and AM Night with the same rules. FM relies on line-of-sight or in other words direct line distance mileage separation. AM relies on the ground conductivity of the earth, not direct line of distance. FM waves are not refracted by the ionosphere, therefore FM can use the same allocation rules for both day and night. Due to the ionosphere, AM waves skip over large areas at night and this should be considered. Model 1 ignores the laws of physics just to computerize or simplify the procedure of the allocation process. Model 1 served its purpose in the initial phase of the expanded band process. However, Model 1 artificially limits expanded band service and it does not provide for the most efficient use of spectrum space. Therefore Model 1 is no longer in the public interest. For example, the cochannel and 1<sup>st</sup> adjacent Model 1 channel distances were selected to primarily protect the 1 kW non-directional nighttime signals rather than the daytime signals. As a result, by trying to use the same spacing rules to protect the nighttime signal we automatically and artificially limit the daytime signals. We have determined from our studies that most expanded band stations could operate today with much more daytime power utilizing non-directional antennas and still meet the contour protection as used in the regular band, thus allowing the same allocation protection of any regular band station.

This petition does not advocate a simple additional power increase for the expanded band station. We request that for both day and night allocation purposes expanded band stations should be allocated under the same rules as a regular band stations.

A two-allocation process as we now currently have simply creates more work and confusion for the staff and the broadcast industry. Even though Model 1 singularly is a more simplified process, it creates more work and more need for waivers due to its over-simplification of the process.

To have a single allocation process for the entire AM frequency band would simply the staff's work. It would reduce the need for waivers and the necessity to completely develop a new allocation process. The most efficient use of spectrum space should take a higher priority than the ease of computerization of the allocation process.

Bromo Communications, Inc.

William G. Drown

William G. Brown

#### **CERTIFICATE OF SERVICE**

I, William G. Brown, of Bromo Communications, do hereby certify that copies of the foregoing have been sent via first class, U.S. mail, postage prepaid, this 3<sup>rd</sup> day of February, 2005, to the offices of the following:

Lauren A. Colby, Esquire LAW OFFICE OF LAUREN A. COLBY PO Box 113 Frederick, Maryland 21705-0113 John C. Trent, Esquire PUTBRESE, HUNSAKER & TRENT 200 South Church Street Woodstock, Virginia 22664

William G. Brown

William G. Prount